

REMARKS

Claims 1 – 3, and 5 – 22 are pending in the application and these same claims have been rejected in an Office Action dated February 7, 2007. Applicants herein amend claims 1, 7, and 21. No new matter has been added. As a result, claims 1 -3, and 5 – 22 are pending.

Summary of Telephonic Interview

On May 8, 2007 the undersigned conducted an interview with the Examiner, and as a preliminary matter, the undersigned would like to thank the Examiner for the helpful comments regarding the Application. During the interview, the 35 U.S.C. § 112, paragraph 1 and 2 rejections were discussed, and the art as applied to claim 1. During the interview the Examiner agreed that the currently amended claims overcome the 35 U.S.C. § 112, paragraph 1, paragraph 2 rejections, and the 35 U.S.C. § 103(a) rejections.

Claim Rejections 35 – U.S.C. § 112 ¶ 1

Claims 1, 7, and 21 stand rejected under 35 U.S.C. § 112, paragraph 1, as allegedly failing to comply with the enablement requirement. In the present Office Action, the Examiner rejected claims 1, 7, and 21 for including claim language that “seems to point to two different documents,” (Office Action dated February 7, 2007 at page 2) and “[n]o mention of the second XML document being combined with the XSD is mentioned in the claims. Therefore, a doubt [sic] arises as to how the comparison is made with multiple XML documents and XML schema definitions based on the presently claimed language.” (*Id.* at page 3). Applicants respectfully submit that claims 1, 7, and 21 satisfy the enablement requirement for at least the following reason. The test of enablement requires that the disclosure contain sufficient information regarding the subject matter of the claims to enable one skilled in the art to make and use the claimed invention without undue experimentation. (See, e.g., M.P.E.P. 2164.01). Claims 1, 7, and 21 recite determining if the second XML document has forms or structures unincorporated in the generated XML schema definition. FIG.

4 of the present disclosure depicts one, non-limiting example, way to determine whether a second document has forms or structures unincluded in an XML schema definition. Therefore, Applicants submit that claims 1, 7, and 21 are described in sufficient detail to enable one skilled in the art to make and use the claimed invention. Accordingly, Applicants respectfully request that the Examiner reconsider the 35 U.S.C. § 112, paragraph 1 rejections.

Claim Rejections 35 – U.S.C. § 112 ¶ 2

Claims 1, 7, and 21 stand rejected under 35 U.S.C. § 112, paragraph 2, as allegedly being indefinite for failing to particularly point out, and distinctly claim, the subject matter which the Applicants regard as their invention. Applicants have amended 1, 7, and 21 to clarify the claims. Accordingly, Applicants respectfully request that the Examiner reconsider the 35 U.S.C. § 112, paragraph 2 rejections.

Claim Objections

The Examiner has recommended replacing the word “unincluded,” as recited in claims 1, 7, and 21, with the phrase “not-included,” as disclosed in an example embodiment of the present disclosure. Applicants appreciate the Examiner’s helpful remarks, and have fully considered the Examiner’s recommendation, however Applicants are not inclined to make the recommended changes.

Claim Rejections 35 – U.S.C. § 103(a)

Claim 1 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Evangelos Kotsakis, XSD: A Hierarchical Access Method for Indexing XML Schemata, Copyright 2002, in view of U.S. Patent Application No. 10/279,481 (Feng). Applicants submit that claim 1 patentably defines over Kotsakis in view of Feng for at least the following reason. Applicants submit that Kotsakis fails to teach or suggest at least an inference engine that accepts an XML document as input, and generates a XML schema definition that defines the elements that appear in the XML document, and attributes associated with the elements. In

the Office Action dated February 2, 2007, the Examiner stated that the above referenced claim limitation is shown by the process of taking two DCSs and merging them into a generic XML schema. (Office Action dated February 7, 2007, at page 5). Applicants submit that the above referenced portion of claim 1 is patentably distinct from Kotsakis. Claim 1 as recited, is directed towards generating XML schemas by processing a XML documents with an inference engine to define the elements and attributes in the documents. Kotsakis, on the other hand, utilizes XML schemas that are created in some undisclosed way to derive DCSs. (See, Kotsakis at page 175, “a primitive DCS is derived directly from a ... XML schema.”)

Moreover, the way Kotsakis merges DCSs is patentably distinct from the iterative process described in claim 1. For example, in an embodiment of the present disclosure, a XML document is processed by an engine, the engine searches for an XML schema in a collection that describes the document, and if no schema exists, a new schema is inferred and added to the collection. Then, in some situations, the document may be processed by the engine at a later time and if the document has been changed, the schema can be refined, i.e., the engine can refine any assumption it made about, for example, the type attribute associated with the element it analyzed. (See, e.g., Application at paragraphs [0041] – [0049]). Applicants submit that Kotsakis fails to infer anything about the elements or attributes in a XML document. The portion of Kotsakis pointed to by the Examiner in the present Office Action does not teach the iterative process described in claim 1, it only teaches that a merged DCS is the union of the elements in two DCSs. (*Id.* at 183). Moreover, the merged DCS does not include inferred information about, for example, the type of an element in a XML document. (See Kotsakis at page 175, “an XML schema may be seen as a DCS that has been enriched with type constraints.”)

Applicants submit that the deficiencies of Kotsakis are not cured by Feng. Feng is generally directed to modifying XML schemas, however claim 1 as recited is patentably distinct from Feng’s technique. For example, the technique of Feng teaches multiple operations that may be performed on a XML schema to obtain a new XML schema. (see, e.g., Feng at paragraph [0027] – [0043]). Once the operator is satisfied with the changes, they may invoke the “evolve schema” operation to save the changes. (*Id.* at [0044]). According to Feng, the system then validates the changes by comparing the “set of all valid XML documents of the current XML schema ... [to] ... a second set of all valid XML documents

of the new XML schema. If the second set of XML documents contains the first set of XML documents ... the schema evolution is valid.” (*Id* at [0049]). Applicants submit that Feng fails to teach or suggest at least an inference engine that accepts an XML document as input, and generates a XML schema definition that defines the elements that appear in the XML document, and attributes associated with the elements. Since Kotsakis in view of Feng fail to teach or suggest all of limitations to claim 1, Applicants respectfully request that claim 1 be placed in condition for allowance.

Independent claims 7 and 21 recite similar elements to that of claim 1 and patentably define over Kotsakis in view of Feng for at least similar reasons as claim 1. Accordingly, Applicants respectfully request that claims 7, and 21 be placed in condition for allowance.

Insomuch as claims 2, 3, 5, 6, 8 – 20, and 22 depend directly, or indirectly from claim 1, 7, or claim 21 they too patentably define over Kotsakis in view of Feng. Accordingly, Applicants respectfully request that claims 2,3, 5,6, 8 – 20, and 22 be placed in condition for allowance.

CONCLUSION

Applicants respectfully request that the Examiner issue a Notice of Allowance of all claims.

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